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## Metacognitive strategies as points in teaching reading comprehension

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### Abstract

This article reports on a small-scale intervention that examined the effective implementation of metacognitive strategies to reading comprehension, in the frame of a metacognitive pedagogical model, at the Eurasian National University with the 2<sup>nd</sup> year students who was taught English as a foreign language, during 15 weeks. We divided them into two groups as 'control' and 'experimental' according to FCE pre-testing so the levels of reading comprehension of both groups were equal. Our research included 3 stages: a) preparation; b) active work; c) analysis. As a result we worked out the practical teacher's manual "GUIDE on using metacognitive strategies in teaching reading comprehension" with some assignments and tasks to the short texts that can be useful both for teachers and for the students who are on the way of improving English language learning and teaching. Therefore we conclude that metacognition means thinking about thinking and it is a relatively new field that is concerned with a learner's awareness of her/his own knowledge, cultural ideas and thoughts. From the results of this study we summed up that the participants acquired metacognitive reading strategies and their perceptions revealed important implications about the development of reading comprehension through short stories. Hence, the proposed Guide should be taken into account to aid both teachers and students in the language acquisition process.

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## 1. Introduction

Reading is defined as an interactive cognitive process in which readers interact with text and author's perspectives related to Adams (2007), Wagner & Tannenbaum (2007), Alderson & Urquhart (2004), Baker & Brown (2004), Grabe (2009). Readers' awareness, monitoring and regulating of these strategies while reading are called as metacognitive according to Flavell (1976) metacognition is a child's knowledge about and control over his or her own thinking process and learning activities such as: reading. Moreover, the concept of metacognition includes thinking about the thinking process, self-awareness, understanding, and memory techniques and learning characteristics as noted Flavell (1979). In 2008 Collins & Smith highlighted metacognitive strategies that helped students to focus their attention in an understanding of the content and to make connection between past knowledge and new information. The aim of metacognitive strategies is to teach students how to set objectives and how to be effective and independent was emphasized by Baker (2002). In 2009 Baker & Beall deepened that metacognitive strategies are related to how we think and learn including three skill techniques: planning, monitoring and evaluation. In the beginning of reading assignment students must be informed on how to use their planning, monitoring and evaluation skills. It is of great importance to improve the questioning skills of students in the process of teaching metacognitive strategies. Studies on metacognition and reading comprehension reveal the strong relation between the uses of strategies, awareness and reading comprehension as Brown (1980), Paris & Oka (1986).

The urgency of the small-scale intervention consists in the new approach to the problem teaching reading comprehension through using metacognitive strategies. The scientific novelty of the research is that this kind of strategies are not yet used in Kazakhstan where English is taught as a foreign language. So the purpose is to find the ways out of existent problems in teaching reading comprehension by suggesting a model of metacognitive strategies. Moreover to achieve the purpose we set the following objectives: to define the essence of metacognition; to determine the aim and nature of teaching reading comprehension; to improve the reading skills by using short stories; to work out a model of teaching reading comprehension; to implement the model of metacognitive strategies and to compare the results; and to work out "GUIDE on using metacognitive strategies in teaching reading comprehension".

## 2. Metacognition and Reading Comprehension

Metacognition, or thinking about one's thinking, is the foundation for other reading comprehension strategies. Proficient readers continually monitor their own thoughts, controlling their experience with the text and enhancing their understanding. As Tanny McGregor explained in *Comprehension Connections*, "Text plus thinking equals real reading!" Teachers can help students develop this skill by modeling and providing concrete experiences to help students understand and apply the strategy to fiction or nonfiction text. Reading comprehension is a critical component of functional literacy. Comprehension is the understanding and interpretation of what is read.

Further we chose short stories as the base of reading comprehension in teaching EFL in Kazakhstan. First, the deviated and figurative language of poetry necessitates very long time to grasp. Second, the length of novel will make it difficult for such classes to finish. Finally, drama can be used in classes, but it will be difficult to act out a play in crowded classes within limited course hours. Considering these objections, it is obvious that among literary forms, short-story, which is defined by Poe "as a narrative that can be read at one sitting of from one-half hour to two hours, and that is limited to „a certain unique or single effect to which every detail is subordinate", seems to be the most suitable one to use in the University. The idea is also in line with Collie and Slater (1988) when they list four advantages of using short stories for language teachers.

## 3. Pilot Teaching of Reading Comprehension

This research is conducted not to confirm or disconfirm earlier findings, but rather to contribute to a process of continuous revision and enrichment of understanding. So the following study was not aimed to demolish other researchers' views on this problem but to provide Kazakhstani educational system with detailed data about local situation in teaching and learning of foreign language. Much of what is known about the way students perceive

reading comprehension, learn English and improve thinking skills through metacognitive strategies is based on teachers' and researchers' intuitions. And the study was developed and designed to investigate Kazakhstani students' attitudes and learning reading comprehension stories in EFL classroom. At the same time, conducted research displays benefits and drawbacks of short stories during learning and teaching of the target language. We also plan to explore the complex associations among contexts of instruction, student characteristics and teacher characteristics and how they support or fail to support, as a system, students' reading comprehension gains.

### 3.1. Group profile

The study took place at the Eurasian National University in three groups of students of speciality "Foreign language: two foreign languages". The total number of students participated in the study was 60 and we taught them Basic English Course. Participants were the 2<sup>nd</sup> year students with intermediate level of English language acquisition. We divided each group into two subgroups A and B as 'control group (A)' and 'experimental group (B)' by FCE reading test so the levels of the group members in both groups were the same. Totally our experimental learning lasted from September till December 2014. We gave lessons per 3 hours in a week. As a matter of fact the group used materials according to Curricula. The manual was very complicated; the teaching material - texts, songs, speech in general were authentic and written in modern language. The structure of the exercise book was well-planned, easy in usage and to understand. The exercise system was chosen according to the standards and includes such variants of tasks as pre-, while- and post stages. Generally speaking, the book was constructed in proper way. Students had educated enough to understand our speech and communicate with each other. To tell the truth the learners were very active and alive-alert participants at the lessons of the English language. All the students had good and excellent marks, they could catch the idea and information from the first time and used it their speech. The atmosphere of the class was propitious and helped to acquire good results in English learning process.

### 3.2. Collection Data

In order to be able to compare obtained data by using different research methods of this study we used different instruments like:

1. Pre-investigation test: in order to divide the class into two groups.
2. Implementation tasks: to imply the model of metacognitive strategies.
3. Post-investigation test: to check the effectiveness of improvement in reading comprehension deeply

Our methodology to collect data was versatile. At the very beginning of our experimental work the students were asked to write the First Certificate English Reading Test. The purpose of this exam was to determine the levels of students in reading comprehension. These questions were selected to learn about the participants' knowledge of English language. We also intended to get a glimpse of what they had experienced earlier which could have shaped their language learning perceptions, behaviors, and attitudes. The exam included 4 (four) parts of reading passages that have structured as multiple choice test. The time duration of the exam was 1 hour 15 minutes. The test was used to identify the students' comprehension skill in English language. This exam was given to students before the pilot study in case to divide students into two groups so each group had to contain the students with the similar level as the other group. Special attention of this exam was to clear up the levels of the students' reading comprehension because the students had different levels. So after giving a short introduction to our study students were asked to write the exam and then we decided to state students' comprehension levels according to their answers.

As an evaluation we used ten-mark system that widely spread in foreign language teaching:

- Low (1 -2 points)
- Satisfactory (3-4 points)
- Average (5-6 points)
- Sufficient (7-8 points)
- Excellent (9-10 points)

The results of reading comprehension of both groups in pre-investigation test are shown below correspondingly in Table 1 and Table 2:

Table 1. The result of FCE reading test in Control group while assessing reading comprehension.

Comprehension levels	Percentage of students
Excellent	10%
Sufficient	17%
Average	20%
Satisfactory	53%

Table 2. The result of FCE reading test in Experimental group while assessing reading comprehension.

Comprehension levels	Percentage of students
Excellent	10%
Sufficient	16%
Average	21%
Satisfactory	53%

According to the Table 1 and Table 2 we had divided the students into two groups which were the same in number of students, knowledge, gender, race, and with the identical comprehension levels. For instance, in both groups there are about 10% of excellent students, sufficient – 17% and 16%, average – 20% and 21%, satisfactory both 53%. So Control and Experimental groups were equally in number of students with excellent, sufficient, average and satisfactory comprehension levels. Pre-investigation test helped us to identify one of the reasons of their difference in level of English that further it helped us as teachers to use appropriate methods and approaches in teaching reading comprehension. Thus the students of both groups were identical but they were different in teaching approach that was varied. The first group was Control with traditional system of teaching English as reading stories and answering the questions. The second was training with Experimental teaching model of using our proposed Guide on using Metacognitive Reading Strategies.

3.3. Implementation of GUIDE on using metacognitive strategies in teaching reading comprehension

Generalizing theoretical basis of metacognition we suggested to work out the teacher’s manual “GUIDE on using metacognitive strategies in teaching reading comprehension” focused on the model of metacognitive strategies including the following strategies (Figure 1):

- promoting self-questioning
- thinking aloud while performing a task,
- making graphic representations.

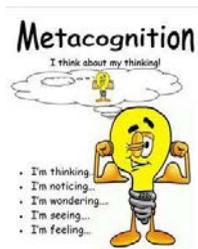


Figure 1. GUIDE on using metacognitive strategies in teaching reading comprehension.

The advantages of the tutorial are both in the theoretical study of the important issues of the metacognitive studies and the intention of the authors to lay down the subject-matter in reading short stories.

Here is proposed the necessary programmed materials: the theoretical information, illustrations (schemes, models), glossary on the theme, and list of the main and additional literature, exercises, assignments, control and resulting frames (tests, programmed tests and answers), references to the internet-sources

The consecutive laying-out consists of the following exercises and assignments:

- language prompts to use during think-aloud,
- paragraph topic headings,
- comprehension.
- missing sentences,
- checkingdetail,

This Guide aims to the students' studying individually the material and performs the tasks on the theme. Undoubtedly, contains the interesting and informative material which enhances the acquiring of both the theoretical knowledge and formation of the practical skills and habits in the students of reading studies. In our opinion, the Guide under consideration may be useful in foreign language teaching. In addition, student collaboration of peer editing of narrative text reveals moments of engagement, leadership, and students taking control. Furthermore, reading stories with using metacognitive strategies production provides a meaningful vehicle for assessment.

The practical tasks of the implementation our proposed teacher's manual "GUIDE on using metacognitive strategies in teaching reading comprehension" focused on the model of metacognitive strategies were the following:

1. To express how learners can think critically and cognitively;
2. To get students make an attempt in learning English reading;
3. To be acquainted with what areas need to be taught in the future so that to correct it.

After pre-investigation task of determining Control and Experimental groups we started with the first implementation task. Lesson duration was 50 minutes. We gave a short story named "Cat in the rain" by Ernest Hemingway to the both groups. The passage contained 2 (two) pages and the language was appropriate for intermediate level of the students' English language acquisition. Beforehand the text was given to the students as a homework.

Firstly in order to check students' metacognitive comprehension we asked the equal questions given below to the both groups, Control and Experimental, but they were varied in the approach to teaching metacognitive reading comprehension that concluded that Experimental group was teaching according to proposed metacognitive model of using metacognitive strategies, but the Control group continued reading and answering the questions in a traditional way. In fact the questions were asked to the both groups:

1. Describe the character of the husband as fully as you can.
2. What is the significance of the rain in the story?
3. What do you feel the cat symbolizes in the context of the whole story?
4. Do you believe that the cat at the end of the story is the same one that the American woman saw earlier through the hotel window? Give reasons for your answer.
5. Why do you think Hemingway uses the word 'husband' in the first half of the story, and then the name 'George' in the second half? Comment as best as you can the style of writing used in the story.
6. Why do you think Hemingway doesn't give the 'American woman' or 'American girl' an actual name?
7. What do you particularly like or dislike about the story?

Secondly the Control group after reading the text answered these questions and analyzed the text. The Experimental group continued working in another way. Here we demonstrated a sample lesson plan for teaching metacognitive comprehension. The lesson consisted of 3(three) parts and this plan was implemented only for Experimental group as pilot study part.

### **Sample Lesson Plan**

*Part 1: Model the metacognitive strategy.*

a) We had a discussion on the following topics:

- Have you ever read a book and found yourself staring off into space while reading?
- Whether you knew it or not, you were probably wondering about what you read.
- Often when you pause in your reading, you find yourself thinking about a character in the story or an amazing fact about a topic.
- You are revisiting some of the ideas in your reading and asking yourself what they mean.

Mostly the students' answers were the next: "When I get to the end of the book, or even to the end of an important page, I pause and consider what I have just read. Putting the author's ideas in my own words helps to fix them in my head. I am monitoring my own comprehension."

b) Next we proposed them to read aloud a few pages of a short story while students follow along. It perfectly practiced their pronunciation and promoted their confidence in public speaking, or even self-esteem. We tried to

anticipate ideas and words in the text indicating appropriate places to pause. We asked them to stop and think aloud about what the author might be saying or suggested.

*Part 2: Learn students to trace the strategy in the same text.*

We continued reading the short story and asked students to think critically about the topic as they had read. After we had finished, we asked students to write in their reader-response journals, expressing ideas or emotions that they had about what the author was trying to say. After students finished, we proposed them to share their responses and to discuss why these ideas were important to them as they read.

*Part 3: Learn students to apply the strategy to another text.*

The goal of the lesson was to give students an opportunity to be able to apply what they have learned to future readings. We predicted: “What are we going to do as we read the next story?”, “Think about what we are reading so that we can share with our ideas with your friends in the class.” We listened to the students carefully as they read aloud or conducted another shared reading session. Moreover we asked them to record at least one major idea in their journals and then share their responses in a small group or with a partner. If students had questions about the text, we encouraged other students to suggest answers.

Then they had been doing ordinary activities like cloze test, true/false tasks, fill in the gaps tasks, and etc. related to the texts in their course books in reading parts of each unit according to the syllabus. This kind of activities were appropriate for the 2<sup>nd</sup> year students because taking into consideration that they were not only on the way of learning language, they were mostly in the process of improving English as a foreign language. For this purpose we implemented an approach to teach reading comprehension. As we all know that reading is the most effective way in language acquisition. The proposed approach is a module of metacognitive strategies that helps students to understand the text deeper and improves their thinking skills.

During their experimental teaching we observed students in both groups and after this lesson we tested students. According to their answers we came up to the following results of the Control group (Table 3).

Table 3. The result of the Control group’s evaluation of metacognitive comprehension.

Metacognitive comprehension	Percentage of students
Excellent	26%
Sufficient	37%
Average	21%
Satisfactory	16 %

The Table 3 shows that there were only 26% of students had got excellent metacognitive comprehension, 35% - sufficient, average – 21% and satisfactory – 16% in the Control group. It illustrated that most students used metacognitive strategies unconsciously or even did not use them. In fact this number of students was very few and these students may had acquired low metacognitive comprehension.

As we had implemented the teacher’s manual “GUIDE on using metacognitive strategies in teaching reading comprehension” focused on the model of metacognitive strategies with the Experimental group we could see their results (Table 4).

Table 4 The result of the Experimental group’s evaluation of metacognitive comprehension.

Metacognitive comprehension	Percentage of students
Excellent	44%
Sufficient	40%
Average	10%
Satisfactory	6%

The Table 4 shows the results of the Experimental group were higher. There were 44% of students had got excellent metacognitive comprehension, 40% - sufficient, average – 10% and satisfactory – 6% demonstrating that most students used metacognitive strategies consciously and they acquired low metacognitive comprehension. According to the analysis of results in the Tables 3 and 4 we conclude that metacognitive reading strategies can't be developed itself without training. Students may improve their superficial reading comprehension that means, they may relate words, phrases and sentences written in the text, but deeper understanding of the text needs a helping hand of a teacher who can lead the students to the big thinking while implementing teaching metacognitive strategies in language acquisition. Now we pointed out that production of metacognitive reading strategy capitalized on the creative talents of students and consequently they took a great pride in the finished product and in seeing their efforts projected on a screen in front of their peers while engaging the entire class. In addition, student collaboration of reading production or peer editing of narrative text revealed moments of engagement, leadership, and students taking control. Furthermore, metacognitive reading strategies provided a meaningful vehicle for assessment.

### 3.4. Post-investigation results

We continued giving short stories for home reading and asking the similar questions that lead students to think wider and deeper. All lesson plan were organized to work with one text. Both groups read the same stories during the investigation but metacognitive strategies were used only in the Experimental group. More importantly, it should to find interesting and suitable for students' level short stories and those are world literature as well, for instance, "The last leaf" by O'Henry, "The shot" by Alexander Pushkin, "The man with the scar" by William Somerset, etc.

As a result of improvement of students' metacognitive comprehension we were giving the last short story that we used in our study. The story was "The Ambitious Guest" by Nathaniel Hawthorne. The language of the story was appropriate for the intermediate level containing 4 (four) pages. This story was also given as a homereading. Students showed their willing to read the short story with excitement. When the time came to discussion we started to ask questions by using metacognitive strategies and we observed that students were ready to answer any questions by raising a hand actively and motivating. In comparison with the first text we saw an improvement in reading comprehension, and mastering metacognitive strategies of students in the Experimental group.

The last task was given to both groups to find out the effectiveness of metacognitive strategies while the other group - Control group hadn't used the proposed strategies, just reading all short stories through out. Besides Control group read all the short stories that the experimental one but they did these tasks in a traditional way in order to check their reading comprehension. At the end of the practical implementation we tried to analyse the results of both groups in comparison to identify their differences in experimental teaching. Group A is the Control group and Group B – Experimental one. In fact we see that the first group stays at the same level, 52%, but the second group increases its metacognitive reading comprehension skills up to 84% (Figure 2).

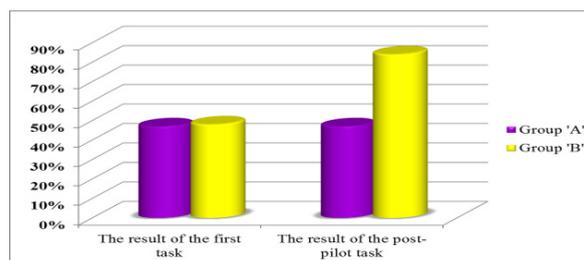


Figure 2. Effectiveness of Metacognitive Strategies.

Figure 2 depicts the evidence of reasonable improvement of intermediate level students in reading comprehension. Reading strategies discussed after the pre-test gave the opportunity to improve the results in post-test. Group 'B' is 52% that shows students' metacognitive comprehension as poor, while Experimental group' results – 84%, more higher. The conducted experiment is supposed to help the students to improve reading skills as

a great help to improve their thinking skills. Reading lesson by using metacognitive strategies through short stories made the students learn the reading comprehension strategies and evaluate critically during the reading.

Therefore, the objective of this small-scale intervention was to determine how learners perceive the reading comprehension strategies focusing on the students' improvement of reading comprehension through short stories, a qualitative research design approved to be appropriate and helpful. The main goal of research was to demonstrate that metacognitive strategies have their place in language teaching and that they should be used in teaching reading because learning language is not only mastering grammar, vocabulary, and being able to read and communicate in the foreign language but also improve to comprehend the reading passage deeper and understand the writing style of different writers. In practical approbation we worked out the teacher's manual "GUIDE on using metacognitive strategies in teaching reading comprehension" that integrates metacognitive reading strategy instruction into any English classroom and provides evidence that effective metacognitive reading strategies manual can improve for adolescent students' English reading achievements. Overall, our implementation the teacher's manual "GUIDE on using metacognitive strategies in teaching reading comprehension" focusing on the model of metacognitive strategies is a beneficial and valuable mechanism for improving the four-skill areas of English language competency. Having been through the practical process, we strongly believe that the metacognitive strategies approved as a perfect technique of foreign language learning and teaching with intermediate-level learners additionally it is also engaging, motivating, and creative.

In conclusion, the results of this study have shown that, in spite of some drawbacks, the participants perceived the use of metacognitive strategies. Their perceptions revealed important implications about the development of reading comprehension through short stories. Therefore, these results should be taken into account to aid both teachers and students in the language acquisition process.

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